

- SNODGRASS, R. E. 1919. The seventeen-year locust. Ann. Report Smithsonian Inst., pp. 381-409.
- TAWFIK, M. F. S. 1969. The life history of the giant water-bug *Lethocerus niloticus* Stål (Hemiptera: Belostomatidae). Bull. Soc. Entomol. Egypte, 53: 299-310.
- TORRE BUENO, J. R. 1924. The last molt of *Lethocerus americanus* Say. Entomol. News, 35: 369-370.
- WIGGLESWORTH, V. G. 1972. The principles of insect physiology. Seventh edition. Chapman and Hall Ltd., London. 827 pp.

SCIENTIFIC NOTE

Biological Observations on *Tropidishia xanthostoma* Scudder (Orthoptera: Gryllacrididae).—*Tropidishia xanthostoma* Scudder is an obscure troglophile of the subfamily Rhabdophorinae in the monogeneric tribe Tropidishiini occurring only on the Pacific Slope. S. H. Scudder (1861, Proc. Bost. Soc. Nat. Hist., 8: 6-14 and 1862, Bost. Journ. Nat. Hist., 7(3): 409-480) and A. N. Caudell (1916, Proc. U.S. Nat. Mus., 49: 655-690) describe taxa. This note offers biological observations on the cricket. Additional observations have been offered by Buckell (1922, Proc. Ent. Soc. Br. Col., 20: 9-41 and 1930, Proc. Ent. Soc. Br. Col., 27: 17-51) and Fulton (1928, Ent. News, 39: 8).

My observations were made from January to November, 1973, at an abandoned mine near Mill City, Oregon, in a coniferous forest type biome. The *Tropidishia* population and other troglophilic fauna occurred inside the mine within 70m of the entrance.

T. xanthostoma nymphs of body size to 5mm exhibit conspicuous coloration being light tan to cream color having antennae, thorax, abdomen, metathoracic femora, and tibiae mottled or banded dark brown as characteristic of uniformly colored adults. Maculation disappears through early instar development yielding uniform dark amber coloration which slightly darkens into rich brown at maturity. Antennae and tibiae remain banded through development.

Strong white or red light or sound in the mine does not appear to affect the crickets. Antennae are generally very active and the insects exhibit remarkable agility. Individuals were never noted on the mine floor or in ponded water in the mine tunnels.

Several nymphs were observed in spider webs near the mine entrance but no predation on specimens was observed. No specimens were observed in surrounding subterranean and epigean habitats either at night, during the day, or during crepuscular periods. A pit-fall trap line deployed in August, October, and November failed to capture any *Tropidishia* specimens.

Ecdysis in *Tropidishia* is similar to the process in other insects beginning with symmetrical splitting of the ventral notum. Spent exoskeletal tissue peels from the emerging insect. Coloration of the new instar darkens slightly after emergence and the insect, characteristic of other cavernicoles, consumes the exuvium.

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